

**IN THE CLAIMS:**

Kindly cancel claim 1 and add claims 23-26, as follows:

~~23.~~ A method of making a micro cooling device comprising the steps of :

obtaining a substrate with a top surface;

doping the top surface in a predetermined pattern, such that the  
predetermined pattern facilitates the forming of cooling fins and grooves,

etching the undoped surface to a predetermined depth, forming grooves  
and coating the doped surface with a material that provides tension on a top surface of the  
cooling fins.

<sup>2</sup>  
~~24.~~ A method of making a micro cooling device in accordance with claim ~~23~~,  
wherein the predetermined pattern defines a doped area with a plurality of closed perimeter  
lines with a predetermined thickness and within each of the plurality of closed perimeter  
lines is defined at least one of the cooling fins wherein one edge of the at least one cooling  
fin contacts the respective closed perimeter line.

<sup>3</sup>  
~~25.~~ A method of making a micro cooling device in accordance with claim ~~23~~,  
wherein the step of etching is performed with an anisotropic etching process using an  
etchant having a higher etching rate with respect to the undoped area than with respect to  
the doped area.